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A YARN OVER THE CAPSTAN, IN THE SECOND DOG-WATCH.

——'As a stately deck
Which to and fro the mariner is used
To tread for pastime; talking with his mates,
Or haply thinking of far distant friends,
While the ship glides before a steady breeze.'
Wordsworth.

THE first few days of an outward-bound voyage, as everybody knows who has seen blue water, are always detestable, both to sailor and landsman. The disagreeable circumstances are of various kinds—from the lowest physical discomforts, up to the most incommunicable disturbances of feeling. If you are so much accustomed to the undulatory system of things as not to be sick in body, you are at least sick at heart, and that is the harder of the two to bear. I should say sea-sickness is the grand reconciler for this inner repugnance to an element so foreign to our nature. One comes up so exhilarated from a close berth and its accompaniments to the fresh, sharp sea-breeze, that he is prepared to take everything cheerfully, and already thinks of home and home matters at thought's length, though affording food for many a mood of quiet recollection under the shadow of a sail by the bulwarks, or set to music by the water rippling past his bed at night. Otherwise, a thousand feelings, shaken, uprooted, and set loose, have room to dash together, not having got, as it were, their sea-fastenings on; what you would have, behind or before—between wishing to be back again by the fireside, amongst that friendly circle, looking out at those green trees, and feeling, on the other hand, that it was necessary to go where your only way of life lies onward—you do not know. The discipline has all to be gone through consciously, which that aforesaid gross nausea would have concealed. It takes some time to make one throw off the weakness, and look with straightforward manliness at the business in hand, getting into the bold free character of winds, waves, and clouds.

Officers and crew, too, after a ruder fashion, and less sentimentally, do not find themselves at all at home till towards the end of the first week. You can get little out of them in the way of information or encouragement as long as the former are getting the ship in hand, and the latter have not fallen into each other's habits. For the above-mentioned space of time, the captain, except at meals, is scarcely seen out of his state-room, and does not appear on deck—although what he is doing but keeping out of the confusion it is hard to conceive. The mate is not conversible until he has got the great atrocities of dock and harbour corrected, and their eye-sores somewhat obliterated, by innumerable fine touches, such as a first-mate only can administer. Peering with head aside from bowsprit, stern-boat, maintop, and every possible vantage-point, he has shrouds to bring taut, backstays to set up, masts to get in a line, concessions to the land to be retracted in the shape of sundry coverings and uncoverings; while his subordinates bluster after him, and the merits of the several hands are elicited in this bustling toilet of the ocean beauty, as if she were watched by some secret Presence, or were about to enter on an assembly of old Tritons, and the waste of waters were not growing more and more desolate around her. Meanwhile water-casks are not yet lowered into the hold, spars and booms are in the gangways, long serpent-like bundles of sails are across the deck, the extempore arrangements of departure still subsist, and every now and then, with a lurch of the vessel, some unfastened piece of nautical furniture trundles over to leeward. Till this state of things has subsided, and got into a degree of order, one has no idea of the placid alternation of a ship's routine; watch is confounded with watch, and there is not a leisure hour for man or boy, nor any time when a passenger does not seem to be in the way: a piece of land-lumber he seems to mate and fore-mast-man, which no fastening can give steadfastness to, as he makes his advance to leeward by successive clutches of rope and skylight.

Gradually, however, all settles down into tranquil harmony—the obstacles are cleared away into their various receptacles, watch and watch is set, the anchors are got in, and the chain-cables stowed: that most vivid realisation of being fully at sea! When you come upon deck, the sky first bursts calmly overhead, then the broad heaving ocean round; the large white sails, sheet beyond sheet drawn downwards, are full of quiet wind, a faint motion now and then stirring their stately bosoms, the ropes and reef-points lying on them silently, and their long seams and quaint fresh-coloured patches are picturesque as the touches of the woods. Compared with her look in the docks—bare, furled, and rigid—the moving ship is as a shadowy, rustling summer tree to its wintry skeleton. The mate is looking up aloft, while at their separate occupations above and under, up on a solitary yard, or far out on the bowsprit, the sailors are pursuing tasks more genial than those of labourers in the field, mowing in the hot meadow or following the dusty plough. While one passes the ball of spun-yarn round the rope for the other's instrument, remote from hearing, what hints of wondrous things, so lightly seen, do pass between them. The two have come together from all regions of the globe, and will part again after this voyage, yet how coolly do they exchange their confidence, as it were by accident, glancing now and then on the smooth horizon for a speck upon it, the only object that could touch their indifference! The man at the wheel, now eyeing the compass, now the trembling corner of a royal through the round-house opening, looks contemplative as a sage. There is

no time or place more favourable to pure thought than are a voyage and a ship's weather bulwarks at sea. The foundations of one's opinions, nay, of his character, may naturally undergo a thorough revision—all tends to grow clearer, purer, deeper, and freer too. Then how tenderly and completely do affections, remembrances, afflictions, arrange themselves in that tranquil, spiritual medium, in that resignation of all actual possession; and we measure and try everything as by a water-balance—the standard of just and equal! It is somewhat difficult to say whether seafaring men do acquire from circumstances, confessedly more thoughtful and solemn than those of worldly life, the cast of mind to be expected; for of all men, a sailor is the farthest from sentiment or consciousness of anything extraordinary in his experience, as well as the quietest and most difficult to compare with others. But those very peculiarities imply superiority; manly energy and directness of view are the first to be developed in him; and if he reflects, it is a thing either kept secret, or revealed only to those who understand him, in a language of his own, in some quiet middle watch, or by the way, in some half-coined story, to the windlass-group of hearers. I believe that, in proportion to his education, the seaman is indeed greatly superior to any other class of natural livers, and that nature in this element teaches both forcibly and by calm negations.

Somewhat similar to these were my musings on the ninth afternoon since leaving Bristol, as, with studding-sails set to a light breeze astern, the Maria, a small West Indiaman, in which I was the only passenger, kept on her course across the Atlantic; slightly rolling as a vessel does, more or less, with a fair wind. Fair white clouds were moving gently over the sky from east to west, and I fancied their peculiar delicacy and streaky shape already indicated our approach to a new climate. The level ocean-floor was unutterably blue around us, hardly rippling with the slight wind, but cool to look upon out of the hot sun, from the shadow of the towering fabric of sails to the quiet horizon, where not a speck appeared to break the spell of solitude. One can hardly believe, amidst the magic circle of the sea, that earth has any other shape save that which, indeed, is not even an outline, and is unapproachable. The glittering flying-fish, in showers, darted like swallows from one depth to another, or now and then a single one fell on board; otherwise, no living thing but ourselves was in sight. It was pleasanter to yield to the romance of the situation than to moralise, so, lighting an after-dinner cigar, I sat and dreamt, to the influence of its fumes, of verandahs open to the sea-breeze through large green palm-leaves, of aloes flowering against the Venetians, fields of sugar-cane, mountains rising from odorous woods, of graceful Creole ladies, and all tropical-breathing things, as well as of those I had seen in another region. We were in the track of old Columbus, passing to a new world. I watched the men descending the shrouds from their several occupations, while the ship was beginning to assume the leisurely appearance of evening. The decks were cleared of their signs of work; the sailmaker and a boy, who had been busy near me, began to roll up the topsail they had been repairing, as four bells were struck from beside the wheel—six o'clock, commencement of the second dog-watch. At the galley fire the black cook was baling out the tea for the ship's company into their various tin pots, and a group of the crew, in their red or blue shirts and canvas trousers, were gathered about the windlass to their evening gossip; while the boys were sweeping the decks fore and aft of rope-yarns and shavings, and coiling up the stray ropes to the belaying-pins.

This second dog-watch, by the way, is the most pleasant, easy time in the routine of a ship's twenty-four hours. Unless the sails need to be trimmed, no one, even of the watch on duty, is required to do anything; it is the interval when sailors may despatch all their own little matters unmolested, join to speculate on the weather, or talk of whatever casts up. Before the mast, all is cheerfulness and quiet abandonment—rest, joke, supper, and smoking, behind the veil of a sanctuary not then to be intruded on by first mate or subordinate. On the quarter-deck, a like relaxation prevails then: before tea-time, in the quiet evenings, the mysterious captain is seen walking to windward, or smoking a cigar from that side of the capstan, while he chats with the mate, the others having disappeared to enjoy their privacy.*

On this same evening the captain of the Maria, with whom I had already got pretty well acquainted, emerged from the cabin companion soon after the bell had struck; and for the first time I found myself along with him and his first mate—a good-looking, fresh-coloured young man, leaning on the capstan, disposed apparently for an easy conversation. The round flat top of that piece of naval furniture lay between us, covered with its green-painted canvas envelope—a table across which many more dialogues and professional anecdotes had been exchanged than over that down stairs. It has so confidential a look, and yet so business-like, that narrow circle of green canvas, and seems made to relax the strict forms of seafaring etiquette that are preserved apart from it, as much as to tighten the topsail halliards, when it swings round amidst the bars to the chant of the after-guard. Our captain was a hale, weather-worn, elderly man, with hair grayer than his years alone, as I found, would have made him; and as much like a respectable grave country practitioner who had ridden at all hours to see his patients, or a retired lieutenant who still talked to his neighbours of old sea matters, as he was like an acting merchant skipper. Save for his Manilla straw-hat, you might even have taken him for a parson. However, be that as it may, we now gradually fell into a strain of dialogue which led to the worthy old man's relating to us a portion of his biography; not, as he remarked, for anything extraordinary in it, but merely by way of a capstan yarn of a fine night, when the dog-vane was making a parallel with the taffrail. The mate had never sailed in the Maria before, so that the recital was as new to him as to me.

'It's thirty-six years now,' said the captain, 'since I first went to sea; and the more I look back on it, the more I wonder why I went at all, or what port I shipped for at last. The truth is, we're every one of us steering in this life by a sort of compass which tells us what we need only by our wishes shifting from it; as for the chart, that's in the Master's hands, and He gives us the course, a point at a time. There's one book I'm very fond of myself, amongst the few I have below there—it's "the Pilgrim's Progress;" but I've thought, often as I've read it over, some one that knows the sea should write another like it, only more proper to sailors, and call it "the Mariner's Progress." Here I am, at last, fifty-

* The two dog-watches are half the time of common watches—namely, two hours each, from four to six, and from six to eight; one-half of the crew being permitted to go below in turn with the other, which they do ordinarily every four hours; and the steersman is changed.

two, and old for my years: the forty voyages or so of various kinds I've made seem like one long one, in which I've touched land, no doubt, but a strange one, and begin to weary for the same I left. I do think at times, now, I feel the air more homelike, although they haven't yet hailed land from the mast-head; and I've sought latterly to get the anchor out, and see all clear, as well as painting the vessel, before coming into harbour. How it is I don't certainly know, that one should be coming back when he has seemingly been sailing all the while straight on, farther and farther away; and so painful as it is to think that the old happiness of home is gone for ever from the earth, unless it be that the world's round, and one may come into port without ever once wearing about.

'When I was a boy, I can't say I had any particular fancy for the sea. Many take up the notion out of books, and keep a hold of it in spite of all that can be said or done, thinking of the adventures they have read about, or longing to see foreign countries, and something out of the common way. For my part I didn't read much, nor did I ever set any object before my mind more than another. The thing was in me; a sort of restlessness that kept me from settling to one occupation, led me into mischief. I couldn't help it, it appeared to me; for even after I had vowed to keep clear of scrapes in future, when my spirits rose again, I found myself in the middle of another before I knew it. Far from troubling my head about the sea and ships for the romance of them, I ordinarily cared not a straw for the particular scheme of amusement in hand, for it seemed only to rise like a natural vent to the wild pleasure of standing and feeling life. I never lived long enough on land to experience the admiration for scenery I have read of; but I do believe now, that many a time, as we were breaking into some orchard at night for the fruit, even while I scrambled over the pales after my companions, there shot into my heart a secret feeling of the beauty of the trees and grass covered with dew, or the harvest corn-fields out beyond; since I sometimes start at such recollections, and seem at that very period to have had delight in the things, and they waiting all this while to be reflected on, as it were the echo of one's voice after he had given up expecting it. I fancy boys and common folks have the same pleasure in natural things as writers and poets, only they take a round-about way to come at it, and see them more beautiful when they are doing something else.

'The place we lived in was a little country town, where my father lived independent, although he farmed some acres of ground; and our house stood on the outskirts of the town, looking out over a front flower-plot to the street, and beyond to the open country. My father was the least of all characters likely to guide me right: he was a stern man, and hated anything of wild spirits; he was upright and religious withal, but his religion was too formal, and he did not make it come down to children. The smallest prank was rated as a crime; and my mother, a mild, gentle woman, would not interfere to make his authority less, although herself she treated us far otherwise, and my worst grief has been that I minded her precepts too little. The consequence of my father's sternness was, that my younger brother and I feared him, and made all our plans of enjoyment secret as much as we could, which was a habit that led us farther astray than if we had been allowed to be open. I, however, was the worst, chiefly in wild tricks of mischief with my schoolfellows; for Ned was a year younger, and naturally less boisterous, and he often stayed to play with our little sister when I was heading the band to plunder an orchard or destroy some of the neighbours' cats, if nothing less innocent was preferable. An elder brother, by a previous marriage on my father's side, was grown up, and engaged in business: he was the most disagreeable of the family, being of a tyrannical disposition, without my father's uprightness; and I even hated him at that time, while fearing him as much; for if the least provoked, he did not let the difference of age prevent him from using me as ill as I believe my father had done him when he was the only boy. This state of things was not quite so bad when I was near fifteen, and had been at school a year or two, where I learnt some Latin and Greek, and used even to read pieces of Homer, and I had begun to sober down a little. But at that age I was articled to an attorney in the place for three years, and soon began to tire most thoroughly of copying deeds and law-papers at a high desk all day, and to wish for some other course of life. There was another lad of my own age in the office, with whom I got intimate, and he being of as frolicsome a turn as myself, we contrived, every way we could, to make the burden light. We were fond of shooting, and he and Ned and I frequently of a Saturday afternoon went out together to enjoy the sport. As my father allowed us no money to ourselves, however, in connexion with this amusement, we were put to great shifts for obtaining materials; and although our mother often supplied us with small sums, we, along with our companion, gradually got into considerable debt, which we had no means of paying. The shopkeeper having threatened to send in our share of the account to my father, we were in great terror; but it only hastened our carrying out the plan of running away from our apprenticeship, which my companion and I had several times started, with no purpose I know of but just to escape. The situation was growing irksome enough to us, though we had always put off our scheme, since it could be managed at any time, till this circumstance capped matters. We contrived to raise a few shillings between us, and appointed the day, fixing to leave early in the morning, and give ourselves a safe start. We had a good deal of work to persuade my brother Ned, poor little fellow, to join us; but at last he yielded, for he was terribly afraid of the discovery by my father, and maybe more of the disgrace in his mother's eyes, of whom he was very fond, as she made him a favourite. That night I thought my father was much kinder than ordinary; he was in a good-humour, and had promised to take us all a jaunt next day; and though this made it more disagreeable to think of his anger, I own it cost me a sore struggle to bid him good-night when we went out of the parlour to bed. If he had spoken another word, or only looked at me, I would have told him all; but he was looking down at the newspaper, and somehow I didn't like the thought of seeing him look up and say, "What is it?" I never saw him again.

'The light was just breaking over the woods as Ned and I stole out at the front door in the morning to meet our friend at the corner of a lane which led into the high road. I glanced up at the windows to see if anybody would notice us when we should get into the street; but not a soul was stirring, and the white blind of my father and mother's bedroom was down. My heart smote me at taking advantage of their sleep; but I plumed myself on never going back from what I had begun, and I cheered Ned in whispers as we hastened down the street. I cannot remember looking back again, yet the house is before me now, and often has been; although, when I came back there three years after, there was a new canal made right through where it stood, and across the little green garden. I think I see it, standing so still and gray in the dawn, with all its window-blinds down, and the flowers within the rails drooping with dew, and the edges of the fruit-trees behind stretched over the garden hedge above the field, without moving a leaf. I little knew or cared what I was leaving it for; but I daresay, if I had thought it was for a brig's forecastle, the bare sea, and such tyranny as one could not conceive till he knew it, I should have turned round in time, and slipped up stairs with Ned into bed again, come what would. However,

it's no use talking: here I am, no doubt; and I'm more certain than I was then as to a wiser head than mine that's working the traverses, and making the course, though I can't see Him. The log shows a good deal of lee-way, but a skilful navigator knows how to meet that too. Mr Adams,' said the captain here, in a different tone, 'I think this wind's shifting a point already; you'd better get those lower stu'nsails in, and take in the slack of your starboard braces.' The dog-vane on the taffrail was evidently slanting a little inboard, and the lower sails fluttered on their one edge; so the mate left us to alter their trim, the captain of course pausing in his narrative till that duty should have been performed. 'Haul down the lower stu'nsails,' called out the former to the group on the forecastle; and in a few moments those large dark sheets of canvas were coming flapping in from the booms. 'Brace round the foreyard,' said the mate, 'and lie aft here, the larboard watch, to trim sails. Take a pull there on the starboard main-brace.' In a short time all was right, and we were together at the capstan again; while the lamp in the binnacle was lighted, casting upward a warm glow on the steersman's rough face, as he kept the vessel a point away from 'sou'-west-by-south,' in his silent communion with the mysterious pole and its magical witness. The azure vault of heaven was deepening above into intense, unutterable blue, and a star or two had come forth imperceptibly into its empty amplitude. The men forward were already at their confabulation again by the windlass, and the captain resumed, leaving in thought the ocean for those scenes which were written secretly in his heart.

'Strangely enough,' said he, 'I remember all this far more clearly than I do last voyage: the first voyage I made, too, is as fresh to me, while most of what has befallen me since is as confused as a bundle of rope-yarns, and I couldn't spin a story out of them that would hold together. I recollect, after we joined Tom Miles, my fellow-clerk, in the lane, we set off at a pace as if all the town would have been after us in an hour's time; and by seven o'clock or so we were in a new country altogether. We bought some bread and warm milk for breakfast, although we kept away from the towns, lest people might suspect we were runaways by our appearance; and by the afternoon, having got into the spirit of the thing, we were all three quite happy. Miles and I were determined never to go back, though we had no idea what we should take to; for if we did go back, we had a chance not only of being fixed to the desk, which was certain, but of jail to the bargain, for breaking indentures. As for Ned, we did not give him time to think of home; and he laughed and talked as much as either of us. At night, however, when we were beginning to think of seeking out some shed or other to make ourselves comfortable in, we got a fright which we did not expect. It turned out that we were not so far from home as we thought, and we were sauntering along the public road, forgetful of our former caution, in the dusk, when I caught a glimpse of a man on horseback talking to a woman at the door of a house we had passed at the turning. I am not sure why, but the fancy came into my head of its being my step-brother sent after us. I gave the hint to my two companions, and we immediately scrambled through the hedge, and ran along behind it into a plantation farther on, where we concealed ourselves amongst the underwood. I could not stand the temptation to see him baffled though; so I crept near to the road, and looked through the fence just as he came galloping up. Sure enough it was he, and I can't forget the expression of his features, as I saw them in the dusk against the sky, when he fixed on his hat firmer, and went flying past, as if he was to catch us next minute. I do believe he would have half-killed me, at least, in his passion; I being particularly hateful to him, I suppose, from my stubbornness when he domineered over me. We waited a while, expecting him to come back when he found he had missed us; but he did not; and thinking the coast quite clear, we had nearly fallen into a trap. We were quietly walking past the little public-house at the corner again, when our own old house-dog leapt out on Ned, barking for joy, and jumping up about us. This would not have troubled us; but we were scarcely past when we heard a shout from the door, and saw one of our father's farm-servants, bareheaded, coming after us full speed, followed by the landlord. We fled, the dog keeping up, and, as it was almost dusk, had little fear of distancing our pursuers, when we were stopped by a gate, over which the other two were climbing, when John, my father's man, seized hold of me, though too much out of breath to speak. I struggled, but it was no use, when his companion came up and laid hold of me too. "You may as well come, Mr Tom," said the ploughman. "I wont—let me go," said I, renewing my efforts as I thought of my comrades, whom I supposed to be far off by this time. "You can't get off at any-rate," said he; "your father's firm on working the devil out o' you; and he says you only want to go to sea to be a perfect 'un of a devil." "You'll never get me home," I said; "and I'll go to sea in spite of any one."

'John laughed at this, and so did his companion the publican; and they had shouldered me half high, to carry me off bodily, when I got hold of the gate, and suddenly Miles, who had been behind the hedge all the while, and was a quick fellow, swung it open against their legs with all its force. The two men stumbled, and let me go, and I fell over, with the gate between. "Run now, Tom," cried Miles, and off we started again, the men after us; but as we were more than their match at running, and the field led down to a shadowy hollow, they gave it up at last. For another hour we struck onward, and across a common, till we reached an old barn standing in a field alone by the side of a brook, where we made a bed of fern, and lay down together as happy as if we had escaped a press-gang. How we enjoyed ourselves that night, talking over the adventure! We had turnips out of the field to eat, and some apples, with a piece of bread; and we delighted in the very shifts we were put to. We soon fell asleep; but I remember I awoke in the night, and saw the white sky through the open door glimmering low beyond a hill, and Ned was sleeping as quietly as he had done in our little bed at home, with his fair hair tangled in the pieces of fern. I couldn't help thinking how his mother came in, before she went to her own room, to fasten the clothes about him, lest he should catch cold; and it smote me to the heart that I should be helping to lead him away, when she was perhaps at the very moment awake with anxiety about where he was. I was resolved to take the chance myself; indeed the apprenticeship to the lawyer could not be undone; but I fell asleep again, intending to ask Ned if he would go home. The bright morning and the cheerful country put it out of my head again, or, if I did think of it, I couldn't make up my mind to part from Ned. As long as he was with me, I felt myself at home still, for all that was best of it. So we went on in the same way for another day, winding through the sequestered by-paths, and coming out now and then at a farmhouse, where we got milk and bread for the asking, however surprised they looked at our wandering air. I noticed Ned rather duller as this second night drew on, but he said nothing. We took shelter in an open shed, where there were several carts put up, near a farmhouse, and found the straw and sacks more comfortable even than the fern. "Tom," said Miles to me, as we sat here eating our supper, and looking out at the late moonlight night, in which the country was spread far and wide, with a church tower and some house-tops peeping over the trees—"Tom, d'ye think it was such a bad idea that of your going to sea? What do you say, shall we all three go and try our fortunes in that line? We'd sail together of course?" Ned looked up and smiled, as if he thought it a good joke, but he saw me grave enough. "Tom," he whispered at last, "shan't we go home now? Father wont say anything by this time, you know;

and mother 'll be getting anxious." "I'm not going home at all," I said, and Ned burst into tears. "Tom Miles," said I, "my brother Ned must go back, either by himself, or I must go with him. Could you find your way alone, Ned, my boy, or not?" "Oh yes, Tom," answered he. "Let me go to my mother—I hate the sea, and I know mother would break her heart to think of it. I don't mind going back myself, if you wont come too." "Then you shall, as soon as we wake in the morning," said I; "so let's go to sleep."

'Many a time I have blessed God that it was so; when I've been up on the royal yard alone in a squall, and the sail thundering about my head, with the yard perhaps swinging loose, and I could not get the brace hauled taut from below, in a dark night, where the sea was one sheet of foam, and the wind went through one like a blade of ice. Poor little Ned's fair face would have pined whiter and whiter under a sailor's life, and his gentle heart would never have borne up against hard usage and hard words; for the sea isn't the best school for pity, save that a man who did his duty well is missed. For my part, I was somewhat hardened by my father and my brother, and my nature was more obstinate. I never think of that parting without pain no words can tell. We went back two or three miles with Ned, gave him all our money but a shilling, and then bade him good-by at a sign-post; after which we struck out boldly for Plymouth, about twenty miles off. I may say it was a parting-place for all three. Ned grew to be a man, but I never saw him again save once, and shouldn't have known him; and now he's gone down into his grave before the time. Poor Tom Miles too!—it was a bad resolve for him; better had he gone back with Ned. We never parted, indeed, till his hour of death, but it was a bitter death to die without a word of "God speed," and none to see it, though I was little farther from him than I am from you two. He had no mother: it was well, or else the very thought of that moment, and the cruel months he had to go through before it under the treatment of a dog, would have been sufficient to turn his brain at once I think.'—(*To be concluded in next number.*)

WHAT NATURE HAS DONE FOR IRELAND.

Among the great tendencies which characterise the present era, none is more striking than the movement of industry, urging its way onwards with resistless energy. The crusaders of our own days are not less enthusiastic or daring than those of the middle ages, but their war is against prejudice, ignorance, and inertia. Hence all which follows the true lead, which bears upon it the stamp of earnestness, is at this juncture peculiarly valuable. Such is the nature of a work, which we are glad to see come to a second edition, on the natural resources of Ireland.* This country, as is too well known, lags behind the sister countries in concentrated labour and prosperity; yet it appears that, in *means*, she exceeds them both. The work of Dr Kane has had a startling effect in impressing this fact.

Dr, now Sir Robert Kane, published his book under the auspices of the Royal Dublin Society. As an Irishman, he writes in real earnest for the improvement of his native land. 'In other countries,' he observes, 'it has been the most anxious care of government, and of those intrusted with the superintendence of education, to ascertain the nature and amount of their means of promoting industry, and extending the employment of the people. It is thus that every year sees the continental nations making such giant strides in manufacturing activity. It is thus that the physical disadvantages which had so long kept them back, are gradually being lessened in importance. I had always found,' he continues, 'that real progress was effected only by genuine labour. I knew that all that is sound and permanent in England's industrial power grew, not out of oratorical elegancies, but from hard-handed, stern, and persevering work. By such work alone—work of mind and of body—can a people hope to advance.'

The general character of the work may be inferred from a summary of its contents. The first two chapters are devoted to fuel—comparisons of the quality and cost of Irish coal with that of other countries and with turf—with a view to elicit the most economical means of applying it to the generation of steam-power, which the author rightly judges to be one of the great means of promoting the national industry. Next comes a chapter on the water-power of Ireland, accompanied by some interesting details, to which we shall advert more particularly further on—followed by others on mines and minerals—agriculture, flax and linen trade—means of internal communication, and the necessity for the diffusion of industrial knowledge among the people.

Excavations for coal appear to have been carried on at a very early period: in the working of a mine in Antrim in 1770, the miners broke into an old gallery, the walls of which were lined with stalactites, evidently of great age, and antique mining tools were found therein. The coal-fields are situated in the provinces of Munster, Leinster, and Connaught; the northern include the bituminous, the southern the anthracite beds. The vicinity of Lough Allen is said to contain a supply of 20,000,000 of tons; and in Tyrone, seams from twenty to thirty feet in thickness lie within 120 fathoms of the surface. For a long time anthracite was, for the greater part, comparatively useless; for although the heat produced by this coal is so intense as frequently to melt the bars of the fireplace and the bottom of the boiler, yet the temperature of the air passing into the flues was but little altered. 'In such case we must call in the aid of science to free our fuel from this disadvantage. It is at once done by passing the vapour of water through the mass of red-hot anthracite; the water is decomposed; its oxygen combines with carbon, and forms carbonic oxid; its hydrogen is set free. These mixed combustible gases,' continues the author, 'pass into the flues, and inflaming in the excess of air which enters, give a sheet of flame which I have seen to extend for thirty feet under and through a boiler.'

On the subject of turf, we learn that this useful substance covers 2,830,000 acres, or nearly one-seventh of the entire surface of Ireland. 'The characteristic fault of turf, as a fuel, is its want of density, which renders it difficult to concentrate within a limited space the quantity of heat necessary for many operations. The manner of heating by turf is, indeed, just the opposite of that of anthracite. The turf yields a vast body of volatile inflammable ingredients, which pass into the flues and chimney, and thus distribute the heat of combustion over a great space, whilst in no one point is the heat intense. Hence for all flaming purposes turf is applicable.' The use of turf in mills, distilleries, and in steamboats on the Shannon, has of late years greatly increased. In the ordinary state, it costs 4*s.* per ton, or 5*s.* if compressed; while the price of coal is from 5*s.* to 11*s.* 6*d.* The weight of a cubic yard of turf is about 900 lbs.; that of a similar mass of coal would be nearly a ton. It may be remarked that turf charcoal, from its extreme combustibility, is said to be much better fitted for the manufacture of gunpowder than wood charcoal. In a comparison of the cost of working an engine, it is shown that turf did as much work as coal at half the cost. On board the Lansdowne, one of the steamers belonging to the Inland Navigation Com-

* The Industrial Resources of Ireland. By Robert Kane, M. D. Second Edition. Dublin. 1845.

pany, 'before the use of turf was introduced, there was burned in a week, which comprises forty-nine hours of work, twenty-four tons of coal, which, costing in average at Killaloe 15s. per ton, amount to L.18, or 7s. 5d. per hour. To do the same work at present, burning nothing but turf, there are consumed per week 315 boxes of turf, which, at 7d. per box, cost L.9, 3s. 9d., or 3s. 9d. per hour of work—but a shade more than half the cost of coal.' Tabular statements of the cost of working a factory in England and in Ireland, show an economical advantage in favour of the latter country; and after fully discussing the question, Sir R. Kane states his object to have been 'to break down at once that barrier to all active exertion behind which indolent ignorance constantly retreats. The cry of "What can we do—consider England's coal mines?" is answered by showing that we have available fuel enough.'

The water-power of Ireland is estimated as equal to that of 3,038,865 horses; the Shannon, in its fall of ninety-seven feet in fifteen miles of rapids near Limerick, furnishing in itself no inconsiderable portion. The author condemns the present system of constructing mills to suit the lowest depth of water in a river, by which, during a great part of the year, most of the power runs to waste, stoppages are incurred, orders remain uncompleted, and the workmen dissatisfied. He compares this with the more enlightened system adopted at Greenock, where the water is brought from a distance of six miles to the town, and poured into reservoirs containing in the whole 310,000,000 gallons of water; furnishing a power equal to thirty steam-engines of fifty horses each; equal to a productive capital of L.75,000, which employs 7000 people, and creates an annual expenditure in wages of L.300,000; and all by simply making the best of what were previously nothing more than small and useless rivulets. 'In place,' the writer contends, 'of wretched mill-ponds, by which a stock of water is scarcely secured for a week, there should be a basin so capacious, that the floods of an entire winter might be received, and thus invested for most profitable expenditure in the summer.' A case in point is instanced of two floods in Lough Dearg, where in four days the water rose twenty-six inches. 'Now each inch of water on this lake amounts to 3,000,000 of tons in weight. These floods brought down, therefore, in four days, 78,000,000 of tons of water, over and above the vast discharge constantly going on at the orifice of the lake. If these masses of water could have been, by suitable engineering arrangements, preserved from immediate and useless expenditure; if their discharge could have been spread over the entire year, these two quantities alone, of twelve and fourteen inches of rise of surface, the fruits of four days and nights of winter flood, would be able to generate, on the fall of the river (Shannon) below Killaloe, a force acting throughout the entire year, night and day, of 967 horse-power.'

Another instance of what may be done with comparative small streams is pointed out in the Irwell, in Lancashire, which Sir R. Kane states to be probably the hardest-worked stream in the world. In its fall of 900 feet from the first mill on its banks to Bolton, 800 feet are actually economised by mills. He further shows that many parts of the flat shores of Ireland are particularly adapted for the establishment of tide mills, which, by the application of the turbine, a recently-invented water-wheel, may be rendered available for twenty-three hours out of the twenty-four.

It appears that, some centuries ago, Ireland presented a somewhat similar appearance to the interior of Russia at the present day. 'Covered with forests, and possessing iron ore of the highest purity in great abundance, Ireland was sprinkled over with small iron works, in which the wood charcoal was employed, and thus iron manufactured of excellent quality; in fact, such as we now import from Sweden and Russia for all the finer purposes of cutlery and mechanism.' Leinster and Connaught produce iron ore equal, if not superior, to any found in England; and for the smelting and manufacture, Ireland is placed on an equal footing with other countries whose materials lie beneath the soil, by the abundance of valuable fuel which she bears upon the surface. The iron of Sweden and Russia is worth from L.15 to L.35 per ton, simply in consequence of the smelting having been effected with wood instead of coal. Turf answers equally well as wood for the same operation, and is, in fact, exclusively used in the extensive iron works of Bohemia and Bavaria.

The copper mines of Ireland are all on the coast—in the counties of Wicklow, Waterford, Cork, and Kerry. The aggregate value of copper ore raised in 1843 from these four districts amounted to nearly L.124,000, with an outlay of about half the sum in wages. A remarkable fact occurred in the history of the Mucruss mine, which is thus related:—'There was found, in great profusion, a mineral of a granulated metallic appearance, as hard as stone; its colour on the surface dark-blue, tending to a beautiful pink. It was not copper ore: it was thrown away as rubbish. Nobody knew what it was except one workman, who recognised it to be cobalt ore (arseniuret of cobalt), a mineral of great value, from which the beautiful blue glass and smalt blue is made. This man managed to get away upwards of twenty tons of it as rubbish. Long afterwards, a more candid miner who visited the works, and saw some specimens of it, told the proprietor its value. But the deposit had been worked out in order to explore for copper; the produce had been thrown away as useless; and it only remained for the mine owner to ruminate on the fortune he might have made had he possessed a proper knowledge of his business.'

Lead is more abundant in Ireland than copper; that which was formerly manufactured was sent away to Holland and England to be refined, being too brittle for practical use. But the whole operations of smelting and refining are now carried on in the highest perfection in the works at Ballycorus. The quantity of silver extracted from the lead amounted to 4261 ounces in 1843; this amount will doubtless be increased, as several veins of native silver have been recently discovered. Gold, too, has been found in Wicklow, in the streams descending from the heights of Croghan Kinshela, in lumps varying from seven to twenty-two ounces in weight. Workings were commenced by government for the exploration of gold-bearing veins, but the small return led to their abandonment within the past three years. The quantity collected in two years was valued at L.3675. It is certain, however, that deposits of native gold were known to the early inhabitants of Ireland. 'The abundance of gold ornaments and weapons which are so peculiar to this island, and for which no source by importation can be assigned, is sufficient evidence of this, as well as the testimony of our ancient writers descriptive of the use and manufacture of this precious metal. ... After the Norman Conquest of the British islands, treasure was exacted from both to the exchequer of Normandy: the tribute exacted from England was 23,730 marks of silver; but from Ireland, 400 marks of silver, and 400 ounces of gold—an enormous quantity for those times.'

A comparison with England and Scotland, in an agricultural point of view, shows the advantage of natural fertility to be all on the side of Ireland. Of the six and a quarter millions of acres lying waste, more than four and a half millions may be profitably cultivated. Sir R. Kane explains, however, that of the thirteen millions of acres of arable land, much has not been brought under tillage, from a fault in the character of the great landholders, who held farming to be a degradation. 'The possession of the land, with perfect idleness, constituted in itself the criterion of respectability. The working of a tillage farm, even if more profitable, was thus fatal to the social position of the occupier; whilst, if he kept only a herd to mind some cattle, and spent his time and money in hunting and in drinking, trusting to protection for high prices, and to Providence to pay his debts, he mixed with the notables of the land, and looked down

with scorn ineffable on all that savoured of occupations vile, of industry or intelligence.' Of farms above thirty acres, the number is 48,312; but of those varying from *one* to *three* acres, 306,915.

Sir R. Kane is of opinion that were the duties on sugar not so high, the cultivation of beet-root for the manufacture of sugar might be profitably introduced into Ireland. We doubt, however, if fiscal arrangements will ever leave this course open to capitalists. The cultivation of flax is one of the great resources of Ireland; one which, properly managed, does not exhaust the soil. The fibrous portion of the plant, the part used by the manufacturer, takes nothing from the land. Consequently, if the water in which it has been steeped, and the stalk removed in 'scutching, be returned to the land, the fertility of the latter will be restored; and thus materials at present utterly neglected, and even a source of inconvenience, may be converted into most valuable manure.'

Want of space forbids our noticing many other valuable topics treated by Sir R. Kane: we cannot do more than advert to some moral reforms which he adduces in connexion with the question of industrial education. 'In Avoca,' he tells us, 'on pay-days, where 2000 men are employed, 500 gallons of whisky used to be bought by the miners, and drunk upon the works. The men spent the night in fighting, whilst their wives and children begged in vain that some of their wages should go for provisions and clothing. ... There is now upon pay-days no whisky whatsoever sold. The wives of the workmen receive their wages for them, and quarrelling is unknown. ... Some years ago the village of Bonmahon presented, on pay-days, a scene of strife and drunkenness, which always required the intervention of the police, and often rendered the position of the superintendents dangerous. At present nothing of the kind is known; a temperance hall for social quiet meetings, and extensive school-rooms for the education of the children, are now built, and the same number of individuals are able to earn L.300 per month more than they formerly received, by the greater steadiness and attention to their work which accompany their improved domestic habits.'

Sir R. Kane exposes the folly of the outcry that Ireland can do nothing unassisted. 'The fault,' he says, 'is not in the country, but in ourselves: the absence of successful enterprise is owing to the fact, that we do not know how to succeed: we do not want activity—we are not deficient in mental power, but we want special industrial knowledge. England, which in absolute education and in general morality is below us, notwithstanding our criminal violence, is far above us in industrial knowledge. The man who knows not how to read or write, who has never been at church, who never taught his child to reverence the name of his Creator, will be a perfect master of his trade. The machines he constructs, or the products he elaborates, will be most perfect in their parts, most suited to their purpose, and most economical in their cost; from the tasks which he undertakes, nothing will turn him aside; he knows that time as well as labour is required for an industrial result; he invests his time as he invests his money, as regularly and as extensively; his steadiness and perseverance in his pursuits are thus part of his industrial knowledge; his acquaintance with the probabilities of his trade prepares him for difficulties, and hence enables him to surmount them. Such things, he knows, must be in ordinary course; and thus he works constantly on, through alternations of success and failure, to his final triumph.'

These are wholesome truths, and we only wish that the writer had gone one step farther, and endeavoured to impress on his countrymen the absolute necessity for their abstaining from those acts of violence which intimidate capitalists and the skilled labourers from England, whom they consider it desirable to employ in their Irish enterprises. The fear of encountering such acts may now be unfounded, but it must be long before impressions of this kind become obliterated. We are not without hopes, however, that the measures in course of adoption will tranquillise that unfortunate country, and help greatly to push it forward in a career of prosperity.

THE SUBJUNCTIVE.

The various moods and tenses of the verb *To Do* are in very different degrees of favour with men. Some indulge much in the imperative—*Do*. Many worthy souls are almost wholly for the indicative, *We do*, *We have done*, *We will do*. There is another class, and a pretty large one, who are only known in connexion with the Subjunctive. They *may* do, or they *could* do; but they never *do*. The predominant forms of speech of this class involve, with serious frequency, the words *ought*, *might*, *could*, *would*, and *should*. The fact is, their mission (since everybody must have his mission now-a-days) is to look on, to speculate, to advise, and to censure. They devote themselves to telling what others *ought* to do—what *might* be done if things were as they ought to be—what you *should* have done in such and such bygone circumstances—and what they *would* do if it were their case, which it somehow never is. The Opposition is the type of this class. Relieved from the duty of doing, they bask in the glory of telling what ought to be done, and that without any dread of consequences from their advice being followed. What a nice, easy, pleasant sort of life is that of the Subjunctive!

The Subjunctive men are great in their censure of magistrates and all others who have the unfortunate duty of actually *doing*. They cannot hear of a step being taken by any public body, but they at once pronounce that some other obvious course *should* have been adopted, never dreaming that men with their senses awake could not have failed to see and deliberate upon that possible course, and must have taken the other for reasons good. They never see a building, or other public work, but they point out the folly that has been committed in not making certain modifications of the plan, although it must be quite clear that these would have been adopted but for certain countervailing considerations. Even when a battle has been triumphantly gained, it *ought* to have been gained in some other way, and the victor knew nothing of what he was about. One wonders, after a little acquaintance with your Subjunctive men, what would be the result if they would only condescend to direct or to do something themselves.

We shall fancy a case for the exercise of subjunctive wit and judgment, in a proposed local improvement; say a project for paving a country town, and giving it a better supply of water. The affair is to cost something over and above certain funds at the public disposal. You call for a subscription all down the alphabet of the Subjunctive, when the following donations in advice and criticism are obligingly handed in:—

A. Don't think the town needs improvement. People *should* begin by improving themselves.

B. The committee are quite wrong as to bringing the water from Glensyke: it *should be* brought from Glendub. Cannot encourage such nonsense.

C. Have just been seeing the plans for the drains, which are to be only two feet wide by three feet deep: they will all be choked up in no time, and *ought to be* at least two feet three inches wide, and three feet nine inches and a half deep. *Could* not countenance such bad engineering.

D. Have no objections to the improvements, but dislike subscriptions on principle. Things of this kind *should be* done by general assessment, so that all might pay alike.

E. Rather approve of public subscriptions, but they

ought to be only for objects of a purely benevolent character, which this is not. Were a subscription opened to civilise Asia, Africa, and the western part of America, would not mind giving sixpence.

F. A great deal too much fuss made about cleanliness and supplies of water. The present pumps *should be* let alone. Greatly prefer pump to pipe water.

G. Don't at all like the wording of the prospectus issued by the committee. In one of the sentences there is a confusion as to the nominative of the verb. Cannot sanction bad grammar. *Should have* consulted me on the subject.

H. Understand that it is proposed to remove dung heaps. Consider this an objectionable innovation on old usages. The dung-hills *should be* let alone: they are respectable, and have heard an artist say they were picturesque.

I. Dissent from the plan of repairing the streets. Don't like flat pavement; *should* let the old small stones remain, in order to keep up youthful remembrances.

J. Very much displeased at the idea of giving the contract to a stranger. Anything good going *should be* kept to ourselves.

K. Cannot approve of the manner of appointing the committee of management. *Might have been* done by ballot from the ten-pounders. Wont give a farthing.

L. Don't think that the town should tax itself for anything of the sort. All public improvements *should be* done by government. London and Dublin get grants of money; why *should* not we?

M. The Town-Council *should not have* foolishly squandered the burgh funds, and then there *would have been* plenty of money for this affair. To punish them, I wont contribute a shilling.

N. Dislike alterations — miscalled improvements. *Could show* that the introduction of gas some years ago will prove the ruin of Britain, by destroying the whale fishery. *Would not have* minded subscribing to restore the old oil-lamps.

O. Can call again about Christmas or next spring. People *should not* ask for money at this time of the year.

P. Will wait to see how the thing looks. You *could* easily have had a drawing of the streets as they are proposed to be.

Q. Object, as every reasonable man *would do*, to entering into these operations at present, when wages are so high. *Should* wait till February or March, when labourers are half starving; and then, besides getting the job done cheaply, we *should be* giving a kind of charity at the same time.

R. Cannot afford to give anything. Have enough to do in paying for my toddy. *Should* let the town alone.

S. Do not like to put down my name for a small sum, and equally dislike giving anonymously. *Should* apply to the landed gentry; they can afford to be liberal.

T. Those who have proposed the improvements *should* pay for them; it is none of my business.

U. The plans are all wrong: they *should have been* exhibited at a public meeting before commencing operations.

V. Intend to give something, but have not yet made up my mind. People *should not be* pressed all at once to say what they will do.

W. Expect that everything, as usual, will be mismanaged, and therefore decline subscribing. Matters of this kind *should be* very carefully considered.

X. Am told that the project has altogether been got up by So-and-so. So-and-so is a great deal too forward, and *should* keep his proper place. Consider it my duty to discourage such forwardness.

Y. Partly agree with *X.* in his observations. It *would* certainly have been far more respectable if the plans had been proposed by one of the neighbouring gentry.

Z. Am just going out to dinner, and cannot be troubled about such absurdities. Persons with begging-papers are a nuisance, and *should be* taken up by the police.

We have but one addition to make to this series of illustrations of the Subjunctive, and that is—

That if improvements of any kind, or indeed any sort of public business, were to be left to the men of this class, we *should* undoubtedly see them prove the most helpless of mortals, and the world *would* not thence-forward stir one step in advance.

THE PARLIAMENT OF SCIENCE.

THE meeting of the British Association took place this year (Sept. 10–16) at Southampton, under the presidency of Sir Roderick Murchison, whose recent work on the Geology of Russia, joined to his former productions of a similar kind, undoubtedly entitled him to the honour. Overlooking altogether, as only matter for an after-dinner laugh, the ridicule vented upon this learned body in some of the newspapers, which really are as ignorant of its true weaknesses as they are incapable of appreciating its utilities, we find the meeting described by competent authority as only one of medium interest, and rather less than the usual amount of attendance. It received a visit from Prince Albert, with whom came, as a consequence, Lord Palmerston; but the éclat inappropriately ascribed to this circumstance by the president was a poor compensation for the absence of such ancient props of the body as Sir David Brewster, the Dean of Ely (Dr Peacock), and Professor Sedgwick. There was, however, an unusually brilliant list of foreign visitors; Forchhammer and Oersted from Denmark, Agassiz and Schönbein from Switzerland, Rosé from Prussia, Koningk from Belgium, Matteucci of Modena, and Middendorf from Russia. These men, with our own Herschel, Owen, Faraday, Grove, Daubeny, Playfair, Wheatstone, Whewell, Delabeche, Darwin, and many others of scarcely inferior note, were amply sufficient to constitute a venerable assembly. Amongst drawbacks, it seems strange to have to mention indifference in the townspeople and surrounding gentry. On this subject the Literary Gazette is powerfully eloquent. To us, who always observe matters in England with the eyes of foreigners, nothing of the kind could be surprising, as the unfortunate fact is, that, except in a few peculiar spots, such as the university towns, and a few limited circles of society in the great cities, there is no mental life in that country with respect to purely intellectual matters.

In his opening address on the evening of the first day's meeting, Sir Roderick adverted in just terms to the services hitherto performed by the Parliament of Science—the reports which it had published, and the researches it had instituted. He remarked the many occasions on which the Association had served as a means of directing government to inquiries where a small expenditure of the national funds could much advance the interests of science. There were even, he said, men of science now performing great feats in the cause of knowledge, who might be said to have sprung from the Association, and to be dependent on it. All this we believe to be no more than the truth. Owen, Agassiz, and Edward Forbes, have themselves announced that, in default of the countenance and assistance of the Association, 'they would not have undertaken, and never could have completed, some of their most important inquiries. Agassiz, for example, had not otherwise the means of comparing the ichthyolites of the British Isles with those of the continent of Europe. Without this impulse, Owen would not have applied his profound knowledge of comparative anatomy to British fossil saurians; and Edward Forbes might never have been the explorer of the depths of the Ægean, nor

have revealed many hitherto unknown laws of submarine life, if his wishes and suggestions had not met with the warm support of this body, and been supported by its strongest recommendations to the naval authorities.' There are even men, such as the ingenious and industrious Andrew Ramsay, now of the Ordnance Survey, who have been, as it were, discovered and brought to light by the Association, in consequence of its ambulatory character. We could, from our own knowledge, add several names to this list.

Sir Roderick spoke of the great advances made in geology since the early days of the Association, most of the countries of Europe, as well as America, having now been examined, and found to accord with that arrangement of the strata which had been first laid down in England. 'If, then,' said he, 'the astronomer has, to a vast extent, expounded the mechanism of the heavens; if lately, through the great telescope of our associate the Earl of Rosse, he has assigned a fixity and order to bodies which were previously viewed as mere nebulæ floating in space, and has also inferred that the surface-cavities in our nearest neighbour of the planetary system are analogous to the volcanic apertures and depressions of the earth, the geologist, contributing data of another order to the great storehouse of natural knowledge, has determined, by absolute and tangible proofs, the precise manner in which our planet has been successively enveloped in divers cerements, each teeming with peculiar forms of distinct life, and has marked the revolutions which have interfered with these successive creations, from the earliest dawn of living things to the limits of the historic era.' Referring to a paper by Edward Forbes, presented at last meeting, and since expanded in the publications of the Ordnance Survey, the president remarked on the light which it would throw upon the distribution of animals and plants over the earth. 'In short,' he said, 'this paper may be viewed as the first attempt to explain the *causes* of the zoological and botanical features of any region anciently in connexion. Among the new points which it contains, I will now only mention that it very ingeniously (and, I think, most satisfactorily) explains the origin of the peculiar features of the botany of Britain; the theory of the origin of Alpine Floras distributed far apart; the peculiarity of the zoology of Ireland as compared with that of England; the presence of the same species of marine animals on the coasts of America and Europe; the specialties of the marine zoology of the British seas called for by this Association; the past and present distribution of the great Mediterranean Flora; and lastly, it applies the knowledge we possess of the distribution of plants to the elucidation of the history of the superficial detritus, termed by geologists the "Northern Drift."'

The learned president likewise spoke in terms of admiration of a recent report, by Sir John Richardson, on the fishes of China, Japan, and New Zealand. Coupled, he said, with Sir John's account of the Fauna of North America, 'it may be regarded as having completely remodelled our knowledge of the geographical distribution of fishes; first by affording the data, and next by explaining the causes through which a community of ichthyological characters is in some regions widely spread, and in others restricted to limited areas. We know now, that just as the lofty mountain is the barrier which separates different animals and plants, as well as peculiar varieties of man, so the deepest seas are limits which peremptorily check the wide diffusion of certain genera and species of fishes; whilst the interspersion of numerous islands, and still more the continuance of lands throughout an ocean, insures the distribution of similar forms over many degrees of latitude and longitude.' Many other points of profound interest were adverted to; but a regard to the popular character of the Journal forbids our entering upon them. We can only proceed to select, from the many matters brought before the Sections, such as we think may prove at once intelligible and interesting to unlearned readers.

DAUBENY ON CERTAIN PRACTICES IN AGRICULTURE.

The learned professor specified, in particular, the use of quicklime and gypsum as fertilisers of land. 'The former of these substances he supposes to act in part, by rendering those inorganic substances which are present in the soil more soluble, or—in accordance with the views laid down by the author in a memoir which he has published in the Philosophical Transactions of last year—by converting the *dormant* constituents of the soil into active ones, or into a state in which they become immediately available. He appealed to the authority of Professor Fuchs, confirmed by that of Mr Prideaux of Plymouth, as showing that the alkali may be extracted from granite readily by water, after the rock in a pounded form has been heated together with quicklime; and he stated that a soil exhausted by long-continued cropping, was found by himself to yield to water twice as much alkali, after having been mixed with quicklime, as it had done before. Hence the frequent application of lime tends to produce exhaustion in the land—not only because it supplies in itself no fresh alkali, but likewise because, by rendering that which the soil contains more soluble, it causes it to be washed away more readily by atmospheric water. Ploughing, and other mechanical methods of pulverising the soil, appear to act in the same way; and so also may we suppose to do the sprinkling of the soil with sulphuric acid, as is practised in some parts of the continent. The author then alluded to the various modes of explaining the advantage attributed to gypsum, which certain leading agricultural chemists had proposed: one ascribing its virtues to the direct influence of the salt; another to the indirect good resulting from it, owing to its property of fixing ammonia: a third regarding its acid constituent as of the principal utility; and a fourth, its base. Dr Daubeny gave reasons for rejecting the third and fourth of these hypotheses; but considered that the use of gypsum may be in part attributable to the first, and in part to the second, of the causes pointed out. He supposes that this substance is generally useful to all plants, from its property of fixing ammonia; and also especially serviceable to certain species, by supplying them with a salt which they require for their development.'—*Athenæum's Report.*

GROVE ON THE DECOMPOSITION OF WATER BY HEAT.

[The great interest of the discovery here professedly made by Professor Grove, caused the attention of the Association to be concentrated upon the Chemical Section on Friday.] The ingenious professor commenced by asserting that every process that will combine gases can separate them. He was led to this result from the use of the eudiometer invented by him, which he briefly described. Water is known to be composed of two elements, oxygen and hydrogen, from a chemical union of which it can be easily formed. By passing water through a red-hot gun-barrel, the oxygen unites with the iron, which becomes incrustated with rust, while the hydrogen is eliminated separately. This is the old mode of proceeding; but no success has as yet attended any attempt to collect both the gases in one experiment, without having either absorbed by any other substance. The new process, discovered by Mr Grove, consists in introducing two platinum wires into the lower part of a glass tube, hermetically sealed and filled with water, from which the atmospheric air has been first expelled by boiling. The wire is then heated almost to the point of fusion, by means of the galvanic current, and the intense heat has the effect of completely decomposing the water, the gases rising in small bubbles, which were collected at the other extremity of the tube. As it might be supposed that the decomposition was produced by the action of the galvanic fluid, he next tried the oxy-hydrogen blowpipe, by which the greatest known heat can be produced, and the result was precisely the same. [Some remarks were made by Professors Faraday and Playfair, and in the evening by Sir John

Herschel, tending to inspire caution with regard to the reception of Professor Grove's discovery. Testing experiments will of course be quickly made.]

DOCTORS DIFFERING ON THE POTATO DISEASE.

[What follows is a conversation elicited by a paper of Mr W. Hogan, 'On Potatoes raised from Seed, as a means of preventing the extension of the prevailing disease.'] Mr W. Ogilby thought growing potatoes from the seeds might prevent the scurf and dry rot, but not the present wet rot of the potato. He quoted several instances in which seedling crops had been destroyed. He had been most successful in growing potatoes from a little tuber which sprung from the 'eyes' of the old ones going to decay.—Dr Crook attributed the attack in the year 1845 to 'cold.' The cold burst the vessels; and then came the disease. Heat produces the same effects as cold; it bursts the tissues of the vessels, and the consequence is disease.—Dr Daubeny did not think that atmospheric changes had anything to do with the disease at all. He thought that the most satisfactory theory was that which referred the disease to fungi. He had understood that there was no potato disease in the neighbourhood of the copper furnaces in Swansea.—Dr Buckland had lately visited Professor Payen, who advocated the doctrine that the disease arose from fungi; and he (Dr Buckland) believed so too. There was, in fact, a fungiferous miasm existing, which, like cholera, attacked not all, but those who were predisposed. It was the weak and intemperate that were attacked with cholera; it was the debilitated potato that had the disease. Extreme conditions of temperature debilitated the potato, and then it became diseased. The potatoes were suddenly attacked. He knew a case in which a whole field became diseased in three days. He believed the only remedy was mowing down the haulm of the potato the moment it was attacked.—Professor L. Playfair was certain of one thing—and that was, that the disease was not due to fungi. The nature of it was evident, as it could be produced artificially. If you scraped a potato, and placed it in the open air, it became diseased, and in the course of a few hours the fungi would appear on it.—Mr E. Solly believed that the disease depended on chemical changes, not on the attack of a fungus.—Mr Bush had examined the diseased potatoes under the microscope, and in its early stages had always failed to discover the slightest indication of the existence of a fungus. As the disease advances, first one fungus appears, and then another—and at last animal life. This was the progress of all vegetative decay. The disease always commences on the outside of the potato, and proceeds to the centre. He had also found the disease constantly attended with the development of crystals of oxalate of lime.—Professor Balfour stated that some fungi attacked living and healthy structures, others only diseased ones. The fungus of the potato was a botrytis, which he believed attacked healthy structures.—Mr A. Strickland said, in reference to Dr Buckland's recommendation to mow down the potatoes, that, when his neighbours mowed down their potatoes, he dug his up. They had lost nearly all theirs, whilst he had saved nearly all his.—Dr Lankester observed on the want of evidence to support the theories of either cause or remedies that had been brought forward. Cold and heat had been assigned as causes, by destroying the tissues of the potato; but no destroyed tissues had been shown to exist. Debility had also been supposed to exist; but no proof was given of the existence of debility; and the Dean of Westminster himself had admitted that he had seen the healthiest potatoes destroyed in three days. Positive observation was evidently opposed to the fungus theory. As to the remedies recommended, seedlings had been known to be attacked in more cases than they had escaped, and therefore sowing the seeds could not be recommended. Mowing down the stalks had not been more successful than letting them alone; and it ought now to be known that this meeting had done nothing more valuable than to show the insufficiency of all theories and remedies hitherto advanced.—*Athenæum's Report.*

MR LYELL ON THE DELTA OF THE MISSISSIPPI.

Mr Lyell delivered a lecture on this subject on Monday evening. The delta of the Mississippi is the alluvial flat at its mouth, produced by the matter brought down by the waters in the course of ages. For nearly fifty miles of its extent in that district, the Mississippi presents a vast river running nearly parallel with the sea, from which it is separated at particular places by an embankment of only half a mile across. The valley is nearly level, there being only a rise of nine feet between the mouth of the river and New Orleans, a distance of 150 miles; and the inclination is equally trifling still further inland, being never more than six inches in a mile. This uniformity is explained by the fact, that the moment the river reaches its banks it overflows, and so the velocity, which is only four miles an hour, is instantly checked. The debris carried along by the flood is deposited over the surrounding plains, the principal part being left near the bed of the river; the necessary result being, that the banks have been gradually raised to a higher level than the lands adjoining them. This slope from the river to the interior is as much as eighteen feet in a distance of a few miles. The interior consists of vast swamps, covered with trees, the tops alone of which are visible in time of floods. Sometimes the inhabitants on the banks of the Ohio or Red River, after making a large raft, on which they prepare to bring all the produce of the year, for 1800 or 2000 miles, to the market of New Orleans, find themselves near the termination of a journey of some two months—entire weeks of which may have been passed by them aground, waiting for a flood to float them off again—suddenly hurried through one of the openings which the river makes in its banks, at the rate of ten or twelve miles an hour, and left aground in the midst of a vast morass, where they are obliged to climb a tree for safety, and await the chance of a boat coming to their rescue. Nevertheless, the course of the river cannot be permanently altered by these violent torrents, on account of the great depth of the main stream. Respecting the age of this vast formation some curious points were stated. It appears that the delta has not, in point of fact, advanced into the sea—notwithstanding all the assertions to the contrary—more than one mile in 100 or 120 years past: the amount of sediment in the water is only 1 in 1800 by weight, or 1 in 3000 by volume. The time required for the accumulation of matter found in the delta and valley of the Mississippi must have been 67,000 years; and another 33,000 years must have been required for bringing down to its present position the great deposit above. The larger fossil animals found in the soil of the valley of the Mississippi are the mastodon, the megatherium, an extinct elephant, an extinct species of horse, some bovine animals, and a kind of tapir. Taking the period which he assigned for the formation of the delta as a unit, it would be necessary to conceive as many of these units as the unit itself contained years, in order to arrive at the vast antiquity of even the comparatively modern formations beneath it.—*Spectator's Report.*

SCHONBEIN'S EXPLOSIVE COTTON.

This singular substance was partly the subject of a lecture by Professor Grove at the general meeting on Thursday. The learned gentleman commenced by an explanation of the *rationale* of the composition of gunpowder, which depends on mixing combustible substances with a substance that supplies abundance of oxygen, for the support of combustion, without depending for the supply on the oxygen of the atmosphere. Nitrate of soda, or saltpetre, was a substance that answered these conditions, and when intimately mixed with charcoal and sulphur in proper proportions, it supplied those combustible bodies at once with sufficient oxygen, and the composition became explosive at a given

temperature. There was, however, a considerable residue after the explosion of even the best gunpowder, which showed that the combustion was not perfect, and the residue proved greatly inconvenient by soiling fire-arms. In the invention of Professor Schönbein this inconvenience was entirely remedied, and the explosive force was said to be double that of gunpowder. The substance was, in fact, cotton, which was prepared in some manner not yet made known, and could not be distinguished in its appearance from ordinary cotton. There were two qualities of the preparation, one of which was intended for common purposes, and evolved a small quantity of smoke on explosion; the other, which was more expensive in its preparation, emitted no perceptible smoke, and left no residue whatever. The gun-cotton, he said, explodes at the temperature of 400 degrees—the explosive point of gunpowder being about 600 degrees; and it might be exploded on gunpowder without igniting the latter. Mr Grove then exhibited the experiments. He first exploded a small quantity of gunpowder, for the purpose of showing the large quantity of smoke evolved. He then exploded a small lock of the gun-cotton of the second quality. It flashed off as rapidly as gunpowder, and but a very small quantity of smoke was perceptible. The paper on which it was exploded was but slightly stained. The better kind of the gun-cotton exploded still more rapidly, without any smoke whatever; and it gave out an orange-coloured flame. The exhibition of the experiment was received with loud applause. Mr Grove next exhibited that peculiar property of the cotton not being injured by water. He steeped a piece of the cotton in a glass of water, and then pressed it between blotting-paper to dry. Though it could not have been thoroughly dry in the time, the cotton flashed off when the heated wire was applied to it, and without any perceptible smoke. The flash, however, was not in this case so instantaneous as that of the perfectly dry cotton. The last and most curious experiment was the explosion of a piece of the gun-cotton when placed upon loose powder, without igniting the latter. The experiment succeeded perfectly, though it requires the cotton to be quite dry to insure its success; for if the combustion be less rapid, the gunpowder explodes.

STORIES AND TRANSLATIONS FROM TASSO.

IV.—THE VOYAGE OF THE TWO KNIGHTS.

HITHERTO our extracts from the *Gerusalemme* have been chiefly delineations of human passions and sentiments, which are to the poet as scenes of history and imagination to the artist. We now give an instance of the landscape-painting, the mere descriptive portion of the poem. In this we can hardly choose a succession of more striking passages than the voyage of the two knights to Armida's magic island, if we except the bower of bliss of the enchantress herself.

Armida, the beautiful magician, has, by her wiles, led away the young Rinaldo, whom she detains in a far-distant garden—a paradise of love. Rinaldo, the bravest of the crusading heroes, is needed to join in the last attack against Jerusalem; and Godfrey of Bouillon, the leader of the army, despatches two bold knights in search of him. These knights are Carlo, a German, and Ubaldo, an aged man, who in his youth had traversed many lands, and was now the companion of the wise Guelph, Godfrey's friend and counsellor. Carlo and Ubaldo proceed on their journey, and, arrived at a river near the sea-shore, they meet an old man crowned with beech-leaves, and attired in long robes of snowy linen. He bears a rod, and as he waves it over the stream, the waters become solid, and he walks over it dry-shod. This wondrous old man takes the knights into his cavern beneath the earth, whence spring all the rivers that water its surface. He there gives them wise counsel, in what manner they may best overcome the spells of Armida, and free Rinaldo from her power. To this intent he promises to bestow on them a shield of polished steel, a scroll, and a branch with golden foliage; all possessing some charm or other which he describes. He then leaves the two warriors to repose for the night, and retires.

Having thus given this prelude to the story, we proceed to the next canto, which describes the voyage:—

Soon as the glorious dawn with growing ray
Recalled earth's dwellers to their labours due,
The sage to the two warriors bent his way,
Bearing the scroll, the branch of golden hue,
And mirror-shield. 'Rise, ere the advance of day,
And gird yourselves your journey to pursue!'
He cried: 'Behold my promised gifts, whose charm
Alone can the enchantress' spells disarm.'

The knights depart. Around each nervous limb
The shining mail they clasp, and, 'midst dark ways,
Unvisited by day or twilight dim,
(The aged guide preceding), through the maze
By the same path they came; they follow him,
Until the river-bed their footsteps stays;
Then cried the sage, 'Here does my guidance cease;
Farewell, oh friends; be blessed—go in peace!'

In its deep bosom the broad stream receives
The warriors twain, and lightly wafts them on
With gentle force, as float autumnal leaves
Upon its placid surface rudely thrown;
Till cast on the soft shore that rising heaves,
They see the promised escort to them thown—
A little boat, upon whose high poop stands
The maiden, fated guide to other lands.

Her wavy hair circles her forehead bright,
Courteous and favouring beam her tranquil eyes;
Her face is like an angel's, such clear light
Enkindled sparkles there. Of varying guise
Her radiant vesture seems to mortal sight
Now red, now azure, now of thousand dyes;
So that each time man turns his daring vision,
Diverse and changed appear those tints Elysian.

Such varied plumage girds the beauteous neck
Of the fond turtle-dove, which never seems
Of its own hue, but aye appears to take
Its changing colours from the sun's bright beams;
Now seemeth it a necklace fair to make
Of glowing rubies, now like emeralds gleams;
Now both are mingled. In a hundred dyes,
Dazzling, it fascinates the gazer's eyes.

'Enter, ye fortunate,' the maiden cried;
'This bark in which secure I cross the seas,
For which all freight is light, each tempest-tide
Is stilled, and favourable every breeze;
My master sends me, handmaiden and guide,
To you, not chary of his wish to please,'
She said, and quickly them with active hand
Steered the carved vessel nearer to the strand.

Soon as her skiff receives the noble pair,
She pushes from the shore; the anchor's fluke
Loosens, unbinds the sails before the air;
She sits beside the helm and guides their course.
Here swell the waves, till mariners scarce dare
To trust their frail ships to the torrent hoarse:
Yet by its lightness safe, the maiden's bark
Floats, borne securely o'er the billows dark.

Far swifter than its wont, the favouring wind,
Filling the sails, impels them from the shore:
The waves grow white with silvery foam; behind,
The boat's deep swell sounds murmuring evermore.
But now they reach where the chafed waters find
An ampler bed, and calmer than before
The river flows, till by the engulfing seas
Swallowed, it vanishes by slow degrees.

Scarcely that wondrous bark had touched the bound
Of the still troubled main, when in mid air
The clouds disperse; the south wind's moaning sound,
Foreboding sudden storms, sinks mutely there;
Smoothed by the gentle breeze, the waves around
Curl lightly o'er the blue sea's bosom fair;
And smiles the heaven in sweet serenity,
Which never did itself more lovely see.

There is something very beautiful in this picture of the poet's fancy. The description of the unearthly

maiden, with her 'tranquil eyes,' and her changing rainbow-coloured robes, is a fine specimen of the purely imaginative in poetry. The voyage in the wonderful boat is a fanciful creation, which Southey in his Ship of Heaven, and Shelley in his exquisite description of the voyage of Laon and Cythna after death to their blessed home, have so beautifully followed up; and nothing can be more faithful to nature than Tasso's picture of the sea at rest in the last stanza.

But we must pursue the voyage. The boat sails down the sea—the Mediterranean is meant; but this fact a little injures the supernatural character of the voyage. The vessel passes the plains of Gaza, where the knights behold armies gathered like sand on the sea-shore. In the harbour were numerous ships, some at anchor, others unfurling their sails, others swiftly impelling their oars, so that the bosom of the sea was covered everywhere with foam. Then said the maiden, 'The sea and the shore are thronged with foes, yet the powerful tyrant of Egypt who rules them has not all his troops even there. These come only from Egypt; he awaits others from his vast empire, which extends afar southward and eastward.' While the guide thus spoke, the boat sailed on:—

As a swift eagle flying through the air,
'Midst other birds securely passes by,
Soaring above in lofty regions where
The dazzling sun conceals it from the eye,
So floats between the numerous vessels there
That heavenly boat, unharmed and dauntless by;
Fearing pursuit nor battle, till it glides
At distance from them, safely o'er the tides.

The poet goes on to describe their course, and the lands they pass by; among the rest, Greece, Egypt, Crete, Tripoli, and Alzerbe, which, he says, was the abode of the lotus-eaters. Indeed the minuteness and correctness of Tasso's geography, and the curious historical illustrations which he gives, are surprising. At last the guide points out to the two warriors the place where Carthage once was, in the following stanza:—

'There lies proud Carthage; on the barren shore
Even of its ruins scarce a trace remains:
Thus empires, cities, perish evermore,
And grass and herbage creep o'er haughty fanes:
And yet man murmurs that his life is o'er,
His foolish heart such greedy pride retains.'
The vessel touches now Elsertis' land,
And Sardis' isle is on the other hand.

They now reach the Pillars of Hercules, 'where,' says the poet, 'Spain and Libya have been separated by volcanic fires; such changes does time work on the earth:'—

Four times the sun had risen in the east
Since the celestial boat had left the shore;
Nor harbour sought she; anchorage and rest
Were needless. And, her voyage thus far o'er,
Beneath the narrow straits the vessel pressed
On towards the interminable ocean's roar.
If the shore-bounded sea be great, how grand
When cradling on its bosom many a land!

No more above the towering waters near
Rise fertile Gades and its neighbour coast;
Land, shores, before the dim sight disappear,
Waves, ocean, sky, in distance mingled, lost.
Said brave Ubaldo then, 'Oh thou, who here
Hast led us o'er this boundless ocean tossed,
Say, has it any shore? this world so strange
To which we go, do living creatures range?'

The maiden answers by relating the story of Hercules, how he is fabled to have set up a sign at the Straits of Gibraltar, that no one might go farther in safety. She then speaks of the supposed fate of Ulysses, who, in striving to pierce beyond, was engulfed by the ocean. The knight still questions her, and she describes the inhabitants of these unknown lands, still in darkness and barbarism, but which, she foretells, should one day rejoice in the light of Christianity. She continues thus:—

'The time shall come this tale of Hercules
Shall be to mariners like fable told;
These unknown kingdoms and these nameless seas
Shall glories yet to Europe's eyes unfold:
A nobler bark than ever faced the breeze
Shall measure this wide ocean, fearless, bold,
And, emulous of the sun on his bright way,
Trace the broad regions towards the setting day.

A man from fair Liguria shall be first
To enter bravely on the unknown path;
Nor whirlwinds, tempests, in dire fury burst,
Nor climate strange, nor the rude billows' wrath,
Nor troubles great as e'er on man's head burst,
Nor perils strange that the deep ocean hath,
Shall daunt his spirit, till in lands untried
His noble thirst for fame be satisfied.

Thou, oh Columbus, to another world
Shalt stretch afar thy happy vessel's sail;
Till Fame herself, with thousand pinions curled,
Following thy glories, even her swift eyes fail:
She, who besides Bacchus, sung—unfurled
Displays thy triumphs now; the wondrous tale
Shall reach thy children's children; long and long
Renowned in history and embalmed in song.'

Thus said she; and along the watery road,
To the south-west, the guide pursued her way;
Before the vessel the red sunset glowed,
And far behind it, dawned the rising day:
But while Aurora on the bark yet sowed
Her dewy pearls, and scattered wide her ray,
Far in the dim obscure a mount appeared,
That high amidst the clouds its bold front reared.

As the voyagers drew nearer, they saw that this mountain was shaped like a cone, large at the foot, and tapering gradually towards its summit, whence smoke burst forth during the day, and which at night lighted up the sky with flames:—

And now more isles appeared, more hills, whose breast
Far less precipitous and lofty seemed:
These were the lovely islands of the blest,
As in the world's first youth our fathers deemed;
Upon whom smiled the fair skies of the west,
Whose land unploughed with willing plenty teemed;
Whose soil untilled brought forth a goodly store
Of fruits; whose vines unpruned rich clusters bore.

Here flowering olives never lose their fruit,
And honey sweet from ancient holms distils;
Here leap fresh rivers to the mountains' foot,
And, flowing gently, glide the murmuring rills;
Here summer dews fall soft on every root,
Tempering the heat with breezes from the hills:
These were the Elysian fields, where, full of rest
And peace, abode the spirits of the blest.

The maiden arrives with her charge at these fortunate islands, and stays her course at the first of the ten. Carlo then began—'If the work on which we are bent permits it, let me land, I pray thee, and see these unknown shores, their inhabitants, and their mode of worship; that when I return, I may relate these new wonders, and say "I have been there."' The maiden answered, 'Such a desire is worthy of you, oh, young knight; but God forbids it, who has placed bounds to such a discovery. None may as yet bear news of this deep ocean to your world.'

From a distance the voyagers behold traces of human habitations, of cultivated lands; then they come to a lonely place, where the wild beasts only appear to live:—

Afar in this deep solitude, the shore
Bent inwards, stretching far into the sea,
Two arms, that in their clasp a wide bay bore,
For whose defence a cliff all suddenly
Rose up: the dashing waves its foot broke o'er,
Chafing in vain against their boundary;
Two lofty rocks behind, as signals were
To sailors who this perilous voyage dare.

Below, the hidden sea lies safe and still;
Above, dark forests crown the rocky height;
Between them, sounds of pleasant waters fill
A cave which creeping ivy shades from sight:
Vain in this place is the tired sailor's will
To make the anchor cling to sands so light;
But the strange guide enters this lonely bay,
And furls her sails, that in the breezes play.

The voyage is now over—the knights have arrived at

their destination; for in this island is Armida's bower of bliss. The maiden gives them her parting counsel, and leaves them on the shore. They wait until the early morning has melted into the broad light of day, and then pursue their adventurous course.

D. M. M.

'DOMBEY AND SON.'

THE friends of Mr Dickens must be happy to find him again in his proper walk, and as original and amusing as ever. He has given us an excellent *first number* of his new novel;* the scene and characters in mercantile London; the humour all his own, as usual. Any sketch of a story as yet only in its first steps were of course absurd: it may be enough, for the benefit of the many into whose hands the work has not yet fallen, to bring a few peculiarly Boz-zian touches under attention.

A Miss Tox, a good-natured female hanger-on, is introduced as 'a long lean figure, wearing such a faded air, that she seemed not to have been made in what linen-drapers call "fast colours" originally, and to have, by little and little, washed out. But for this she might have been described as the very pink of general propitiation and politeness. From a long habit of listening admiringly to everything that was said in her presence, and looking at the speakers as if she were mentally engaged in taking off impressions of their images upon her soul, never to part with the same but with life, her head had quite settled on one side; her hands had contracted a spasmodic habit of raising themselves of their own accord as in involuntary admiration; her eyes were liable to a similar affection; she had the softest voice that ever was heard; and her nose, stupendously aquiline, had a little knob in the very centre or key-stone of the bridge, whence it tended downwards towards her face, as in an invincible determination never to turn up at anything.

'Miss Tox's dress, though perfectly genteel and good, had a certain character of angularity and scantiness. She was accustomed to wear odd weedy little flowers in her bonnets and caps; strange grasses were sometimes perceived in her hair; and it was observed by the curious, of all her collars, frills, tuckers, wristbands, and other gossamer articles—indeed of everything she wore which had two ends to it intended to unite—that the two ends were never on good terms, and wouldn't quite meet without a struggle. She had furry articles for winter wear—as tippets, boas, and muffs, which stood up on end in a rampant manner, and were not at all sleek. She was much given to the carrying about of small bags with snaps to them, that went off like little pistols when they were shut up; and when full-dressed, she wore round her neck the barrenest of lockets, representing a fishy old eye, with no approach to speculation in it. These, and other appearances of a similar nature, had served to propagate the opinion that Miss Tox was a lady of what is called a limited independence, which she turned to the best account. Possibly her mincing gait encouraged the belief, and suggested that her clipping a step of ordinary compass into two or three, originated in her habit of making the most of everything.'

A need occurring, in consequence of a melancholy event, for a nurse to the newly-born heir of Mr Dombey, Miss Tox, in concert with Mr Dombey's sister, Mrs Chick, endeavours to get the want supplied; which gives rise to the following scene:—

'"My dear Louisa," said Miss Tox, "is the vacancy still unsupplied?"

"You good soul, yes," said Mrs Chick.

"Then, my dear Louisa," returned Miss Tox, "I hope and believe—but in one moment, my dear, I'll introduce the party."

'Running down stairs again as fast as she had run up, Miss Tox got the party out of the hackney-coach, and soon returned with it under convoy.

'It then appeared that she had used the word, not in its legal or business acceptation, when it merely expresses an individual, but as a noun of multitude, or signifying many; for Miss Tox escorted a plump, rosy-cheeked, wholesome apple-faced young woman, with an infant in her arms; a younger woman not so plump, but apple-faced also, who led a plump and apple-faced child in each hand; another plump and also apple-faced boy, who walked by himself; and finally, a plump and apple-faced man, who carried in his arms another plump and apple-faced boy, whom he stood down on the floor, and admonished, in a husky whisper, to "kitch hold of his brother Johnny."

"My dear Louisa," said Miss Tox, "knowing your great anxiety, and wishing to relieve it, I posted off myself to the Queen Charlotte's Royal Married Females, which you had forgot, and put the question, 'Was there anybody there that they thought would suit?' 'No,' they said, 'there was not.' When they gave me that answer, I do assure you, my dear, I was almost driven to despair on your account. But it did so happen that one of the Royal Married Females, hearing the inquiry, reminded the matron of another who had gone to her own home, and who, she said, would in all likelihood be most satisfactory. The moment I heard this, and had it corroborated by the matron—excellent references, and unimpeachable character—I got the address, my dear, and posted off again."

"Like the dear good Tox you are!" said Louisa.

"Not at all," returned Miss Tox. "Don't say so. Arriving at the house—the cleanest place, my dear! You might eat your dinner off the floor!—I found the whole family sitting at table; and feeling that no account of them could be half so comfortable to you and Mr Dombey as the sight of them all together, I brought them all away. This gentleman," said Miss Tox, pointing out the apple-faced man, "is the father. Will you have the goodness to come a little forward, sir?"

'The apple-faced man, having sheepishly complied with this request, stood chuckling and grinning in a front row.

"This is his wife, of course," said Miss Tox, singling out the young woman with the baby. "How do you do, Polly?"

"I'm pretty well, I thank you, ma'am," said Polly.

'By way of bringing her out dexterously, Miss Tox had made the inquiry as in condescension to an old acquaintance whom she hadn't seen for a fortnight or so.

"I'm glad to hear it," said Miss Tox. "The other young woman is her unmarried sister, who lives with them, and would take care of her children. Her name's Jemima. How do you do, Jemima?"

"I'm pretty well, I thank you, ma'am," returned Jemima.

"I'm very glad indeed to hear it," said Miss Tox. "I hope you'll keep so. Five children. Youngest six weeks. The fine little boy with the blister on his nose is the eldest. The blister, I believe," said Miss Tox, looking round upon the family, "is not constitutional, but accidental?"

'The apple-faced man was understood to growl "Flat iron."

"I beg your pardon, sir," said Miss Tox; "did you——"

"Flat iron," he repeated.

"Oh yes," said Miss Tox. "Yes; quite true. I forgot. The little creature, in his mother's absence, smelt a warm flat iron. You're quite right, sir. You were going to have the goodness to inform me, when we arrived at the door, that you were by trade a——"

"Stoker," said the man.

"A choker!" said Miss Tox quite aghast.

"Stoker," said the man. "Steam-engine."

"Oh—h—yes!" returned Miss Tox, looking thoughtfully at him, and seeming still to have but a very imperfect understanding of his meaning. "And how do you like it, sir?"

"Which, mum?" said the man.

"That," replied Miss Tox. "Your trade."

"Oh pretty well, mum. The ashes sometimes gets in here," touching his chest, "and makes a man speak gruff, as at the present time. But it *is* ashes, mum, not crustinces."

'Miss Tox seemed to be so little enlightened by this reply, as to find a difficulty in pursuing the subject. But Mrs Chick relieved her by entering into a close private examination of Polly, her children, her marriage certificate, testimonials, and so forth. Polly coming out unscathed from this ordeal, Mrs Chick withdrew with her report to her brother's room, and, as an emphatic comment on it, and corroboration of it, carried the two rosiest little Toodles with her: Toodle being the family name of the apple-faced family.'

To these bits may be appended part of the description of the shop and neighbourhood of a somewhat obsolete old ships' instrument-maker of the city of London;—'Just round the corner stood the rich East India House, teeming with suggestions of precious stuffs and stones, tigers, elephants, howdahs, hookahs, umbrellas, palm-trees, palan-

* Bradbury and Evans, London.

quins, and gorgeous princes, of a brown complexion, sitting on carpets, with their slippers very much turned up at the toes. Anywhere in the immediate vicinity there might be seen pictures of ships speeding away full sail to all parts of the world; outfitting warehouses, ready to pack off anybody anywhere, fully equipped in half an hour; and little timber midshipmen, in obsolete naval uniforms, eternally employed outside the shop-doors of nautical instrument-makers in taking observations of the hackney-coaches.

'Sole master and proprietor of one of these effigies—of that which might be called, familiarly, the woodenest—of that which thrust itself out above the pavement, right leg foremost, with a suavity the least endurable, and had the shoe-buckles and flapped waistcoat the least reconcilable to human reason, and bore at its right eye the most offensively disproportionate piece of machinery—sole master and proprietor of that midshipman, and proud of him too, an elderly gentleman in a Welsh wig had paid house-rent, taxes, rates, and dues, for more years than many a full-grown midshipman of flesh and blood has numbered in his life; and midshipmen who have attained a pretty green old age have not been wanting in the English navy.

'The stock in trade of this old gentleman comprised chronometers, barometers, telescopes, compasses, charts, maps, sextants, quadrants, and specimens of every kind of instrument used in the working of a ship's course, or the keeping of a ship's reckoning, or the prosecuting of a ship's discoveries. Objects in brass and glass were in his drawers and on his shelves, which none but the initiated could have found the top of, or guessed the use of, or, having once examined, could have ever got back again into their mahogany nests without assistance. Everything was jammed into the tightest cases, fitted into the narrowest corners, fenced up behind the most impertinent cushions, and screwed into the acutest angles, to prevent its philosophical composure from being disturbed by the rolling of the sea. Such extraordinary precautions were taken in every instance to save room, and keep the thing compact, and so much practical navigation was fitted, and cushioned, and screwed into every box (whether the box was a mere slab, as some were, or something between a cocked-hat and a star-fish, as others were, and those quiet, mild, and modest boxes as compared with others), that the shop itself, partaking of the general infection, seemed almost to become a snug, sea-going, ship-shape concern, wanting only good sea-room, in the event of an unexpected launch, to work its way securely to any desert island in the world.'

It will, we trust, be readily seen, from these extracts, that the good ship Box is righted, and once more fairly afloat. May her new voyage be the most prosperous she has yet made!

THE 'WISDOM OF THE ANCIENTS.'

One hears so much about the 'wisdom of our ancestors,' that it is exceedingly desirable to have some sort of idea of what this wisdom consisted. Fortunately, we are able to throw a little light on the subject, not from vague tradition, or scattered memorials of the past, but from a rare and curious volume which has accidentally come into our possession. 'The Book of Knowledge, or Wisdom of the Ancients,' as this learned production is styled, purports to embrace every species of information which it is necessary to be acquainted with in the natural and occult sciences, and has all the appearance of having been a universal directory in the days of our great-grandfathers.

A chief part of the wisdom of the ancients, we are told in the outset, was the 'observation of days and times, and thence foretelling good and bad events.' As this was a very useful kind of wisdom, it occupies a large section of the work, and, untrammelled with reason or argument, everything is set down with a very charming degree of simplicity. The first occurrence which demands attention is the day of the week on which New-Year's Day falls. A great deal of good and evil, we are assured, depends on this. For example: should New-Year's Day fall on Sunday, 'the winter following will be pleasant, the summer seasonable; there shall be plenty of corn, though the weather in harvest will prove but indifferent; fruit shall very much abound, and there will be a very good seed-time; there will likewise be good flocks of sheep, and cattle shall increase and prosper; but there will be robberies in most places, and perhaps war before the end of the year. Also it denotes the death of prelates and princes, dissension and discord among men, but not of long continuance.' So much for a New-Year's Day falling on Sunday; and for every other day in the week there is a prognostication equally lengthy and portentous. We observe that if it fall on Monday, there are to be many marriages among the common people; if on Tuesday, there are to be very serious differences in the state; if on Wednesday, there is to be a terrible amount of sickness; if on Thursday, the clergy are to have numberless divisions and contests; if on Friday, there are to be plenty of high winds, thunder and lightning; and if on Saturday, corn is to be more than usually cheap, 'but old people shall generally die.'

Not satisfied with these premonitions, the author gives a chapter on what is to take place when Christmas falls on the different days of the week, every day having similarly its own special warnings. Besides the social and seasonal peculiarities that are to ensue, we find that it is a matter of serious moment to be born on the day on which Christmas falls. If Christmas falls on a Tuesday, it is said to be a very capital thing to be born on that day, for it insures long life and plenty; quite as good as being born to a large estate, if not much better. If it falls, however, on a Saturday, it is a sad misfortune for a man to be born on that day; 'for he shall be poor and in disgrace.' Good and bad fortune, however, as it appears, depend more on what day of the moon we are born than on the days of the week. Thus, for every day of the moon's age there is a special prognostication. Those who come into the world on the first day, shall always sleep remarkably well, and shall have pleasant dreams; if on the tenth day, they shall be great travellers; if on the twenty-fourth day, 'the child shall be a prodigy in the world, and make all men admire at his surprising and wonderful actions;' and so on with other days.

The 'wisdom of the ancients' having exhausted itself in vaticinating from days and planetary phenomena, next comes to the art of physiognomy, palmistry, the signification of moles, and the interpretation of dreams; all very important things in their way, whatever modern sceptics may say to the contrary. After much edifying discourse on such matters, the author proceeds to what we should consider to be a very useful department of knowledge: this is the art of finding out beforehand which party shall win in going to law or going to war. The mode of discovering this profound secret, we are told, is wonderfully simple, and only depends on properly understanding a certain table, composed of letters and figures, and comparing these with the names of the belligerents or litigants, 'put into Latin in the nominative case singular.' Such is the whole art; and one cannot but admire its singular perspicuity.

The Book of Knowledge now comes to a more immediately serviceable department—the farmers' calendar, which includes a variety of knowing prognostications respecting the weather, as well as learned explanations of meteorological phenomena. The ancients explain the cause of the rainbow as follows:—'The rainbow is caused by the sunbeams striking upon a hollow cloud, and these being repelled, are driven back against the sun so as to make a commotion; thus ariseth variety of colours by the mixing of clouds, air, and fiery light together.' As to the cause of winds, that is easily explained: 'Wind is said to be an exhalation, hot and dry, engendered in the earth, and having come forth, is carried sidelong upon the face of the globe, and cannot mount upwards above the middle region of the air, which, by reason of its coldness, doth beat it back, so as by much strife, and by meeting other exhalations, its motion is forced to be rather round than right in its falling; and this makes it a whirlwind, which oftentimes, by its violence, carrieth many things with it from place to place.' When these dreaded exhalations cannot make their way through the crust of the earth, they rush about as if mad, and

produce the most disastrous consequences. 'The ancients affirm that the cause of earthquakes is great plenty of winds confined in the heart of the earth, and strivings to break forth, causing a shaking, or sometimes a cleaving, of the earth, and thereby the destruction of many people, and ruin of whole cities.'

The learned expositor next affords us an insight into the cause of thunder and lightning. 'Thunder and lightning are occasioned by an exhalation hot and dry, and being carried into the middle region of the air, is there enclosed in the body of a cloud. Now these contrarieties being thus shut or enclosed into one place together, they fall at variance, whereby the fire and water agree not till they have broken through, so that fire and water fly out of the clouds, the breaking whereof makes that noise which we call thunder, and the fire is lightning, which is first seen, though the thunder crack be first given, because our sight is quicker than our hearing.'

These will be considered sufficiently extended specimens of the species of knowledge which used to be in vogue among even a respectable class of persons from a century to a century and a half ago; nor should we be warranted in saying that such notions are by any means obliterated in our own day. The empirical and superstitious opinions once prevalent among the pretendedly learned and refined, still linger in the minds of the wholly uneducated. A minute inquirer would find among us, at the present time, living specimens of every era in knowledge and social habits, from the landing of the Saxons upwards. Such, till lately, has been the neglect of popular instruction, that large masses entertain precisely the same ideas of natural phenomena as are embodied in the work before us. Of eclipses, earthquakes, thunder and lightning, the movements of winds, meteors, and so forth, they habitually give the most fanciful explanations. They believe in lucky and unlucky days, and with them many trifling and casual occurrences are portentous of disaster. Among the fishing and rural population these superstitions would be found most prevalent, and so likewise would be a belief in witchcraft and similar bygone follies. A case in point occurs in a late report laid before parliament by Mr Frederic Hill, inspector of prisons for Scotland. In visiting the prison of Dingwall, he found, to his surprise, a respectable-looking individual in confinement for having assaulted a poor old woman, under the impression that she was a witch, and as such had frustrated all his professional efforts. 'I live near Tain,' said this deluded man, 'and am a fisherman. I am in prison for assaulting a woman named M—— M——. She is about sixty years old. I assaulted her because she was bewitching everything I had. She prevented me from catching fish, and caused my boat to be upset. The other fishermen said that they should have no chance of catching any herrings while I was with them, and they would not let me go out with them. M—— M—— is known by all in the neighbourhood to be a witch. She has been seen a hundred times milking the cows in the shape of a hare, though I never saw her do so myself. People believe, in my neighbourhood, that if any one gets blood from a witch, she can do them no more harm, and that is the reason that I cut M—— with my penknife; but I held the knife so that it might go into her as short a way as possible. All I wanted was to get blood. I was not the first person who wanted to draw blood from her. Those who advised me to cut her, told me that if I did not she would drown me, and the rest who were in the boat with me, as sure as any man was ever drowned. It is hard that I should be put in prison, for the Bible orders us to punish witches, and there was not a man on the jury who did not know M—— to be a witch.'

A belief of this kind is by no means singular in remote localities; but neither are people of large cities free from absurd and superstitious notions. Not more than from three to four years have elapsed since thousands of people fled from the metropolis, in consequence of a silly rumour or prophecy that there was to be an earthquake on a particular day! Sixty years ago, crazy masses believed in the ravings of Brothers; thirty years ago, Joanna Southcot, and ten years ago, Thom, had their equally visionary followers. And how, possibly, can it be otherwise? A third of all the men, and a half of all the women, in England cannot write their names. Taught nothing, they of course know nothing, at least nothing beyond the routine of ordinary and laborious duties. Even those who are favoured with elementary instruction can, for the greater part, tell you little of physical phenomena; for the best of all reasons, that information on such matters does not fall within the scope of their lessons. And so the world jogs on—thousands of immortal beings living and dying in the midst of civilisation and Christianity with but a little more knowledge of the universe in which they are placed than the brutes which perish.

FACETIÆ.

Lord Stowell's Taste for Sight-seeing.—He loved manly sports, and was not above being pleased with the most rude and simple diversions. He gloried in Punch and Judy—their fun stirred his mirth without, as in Goldsmith's case, provoking spleen. He made a boast on one occasion that there was not a puppet-show in London he had not visited, and when turned fourscore, was caught watching one at a distance with children of less growth in high glee. He has been known to make a party with Windham to visit Cribb's, and to have attended the 'fives court' as a favourite resort. 'There were curious characters,' he observed, 'to be seen at these places.' Lord Stowell was above the pedantry which disdains the gratification of a mere ordinary and every-day curiosity. No one had more knowledge of the common affairs of life; and it was at all times a current observation that the person who first saw any sight exhibited in London, be it a production of nature, or of art, or of artifice—for he would condescend to see even the juggler play his tricks—was Sir William, who could always steal for such relaxation an hour from settling the gravest questions that could be raised on the law of nations. He was the most indefatigable sight-seer in London. Whatever show could be visited for a shilling, or less, was visited by Lord Stowell. In the western end of London there was a room generally let for exhibitions. At the entrance, as it is said, Lord Stowell presented himself, eager to see 'the green monster serpent,' which had lately issued cards of invitation to the public. As he was pulling out his purse to pay for his admission, a sharp but honest north-country lad, whose business it was to take the money, recognised him as an old customer, and knowing his name, thus addressed him: 'We can't take your shilling, my lord; 'tis the old serpent which you have seen twice before in other colours; but ye shall go in and see her.' He entered, saved his money, and enjoyed his third visit to the painted beauty. This love of 'seeing sights' was, on another occasion, productive of a whimsical incident. A few years ago an animal, called a bonassus, was exhibited somewhere in the Strand. On Lord Stowell's paying it a second visit, the keeper very courteously told his lordship that he was welcome to come, gratuitously, as often as he pleased. Within a day or two after this, however, there appeared, under the bills of the exhibition, in conspicuous characters, 'Under the patronage of the Right Hon. Lord Stowell;' an announcement of which the noble and learned lord's friends availed themselves, by passing many a joke upon him; all which he took with the greatest good-humour.—*Totcastel's Lives of Twelve Judges.*

French Knowledge of English Men and Places.—It is not long since the writer of this saw a drama represented at the very *Ambigu* which has produced *Le Marché*, entitled *Les Faussaires*. This piece affords a delectable specimen of the correct idea possessed by the French of English manners and customs. We see in it a peer in partnership with a coiner. His lordship resides in a castle that frowns over a romantic valley, two miles from London; and to this feudal abode the peasants of the aforesaid valley repair, in 'very thin clothing, and but little of it,' to present flowers to the noble owner's daughter *on her saint's day*. The more ignoble villain passes as a farmer, and he dwells in a little hut, situated in a dark glen, adjacent to a gloomy baronial ruin, placed in a solitary part of those sterile mountains

which geographers have *not* marked down between London and Richmond! And all the *dramatis personæ* concerned evince a strong but confusing Puseyite tendency; and, having read Mr Newman's 'Lives of the English Saints' by anticipation, they swear 'par St *Jacques* de Cantorberi' with a force and an alacrity that, on any day of the year, from the eve of St Odillo to the third watch of the festival of the blessed St Sylvester, would have astounded and gratified the venerable Mr Froude himself. But the author of 'Les Faussaires' is a dramatic writer; and it is the privilege of such writers to know nothing and take liberties with their ignorance. Thus the author of 'L'Idiote' speaks of Sheridan as being the greatest modern poet of England! The popular and accomplished writers of the day are, however, in nowise behind the melo-dramatists in ignorance. There is Alexandre Dumas, a man who has been everywhere, and knows everybody who resides there—who has read everything, and written upon *that* and a vast number of other subjects besides—who pens tragedies during a breakfast—and who, if he has not compiled an encyclopædia, has at least plundered all that have been compiled—M. Dumas has condescended, in his 'Pauline,' to afford his French readers a very strange insight into England generally, and Piccadilly in particular. To analyse 'Pauline' would be almost as difficult as to transcribe 'Monte Cristo'—so varied are the fortunes of the heroine and her lover. It will be sufficient to say that, in the course of those fortunes, the lady and her 'friend,' standing in great need of secrecy and seclusion, fly to—Piccadilly, a rustic retirement, sacred even from pic-nics! Now, we know of but one Piccadilly, whose habitation and name are equally divided between the illustrious parishes of St George and St James. The western extremity of its northern side is illustrated by a great warrior; and its eastern extremity by a gentleman who, though *not* a warrior, exercises a profession by which warriors are made effective—the legislative general is at one end, and the executive gunmaker at the other. Somewhere in the mid space of this sylvan rusticity—where there is nothing of Arcadia save an equivocal spot near Lord Burlington's, where the Dryads themselves would be puzzled to find either board or lodging—does the clever M. Dumas make his hero and heroine live in a fancy cottage—a pretty little structure, simple and retired, with Venetian blinds, and a garden full of flowers! ('Une petite maison, bien simple et bien isolée!' 'une jolie petite fabrique à jalousies vertes, avec un jardin plein de fleurs!') There are, besides, a verdant lawn!—beds of roses!—a well-swept gravel walk! and a seat under a magnificent plane-tree, beneath the shade of which love, literature, and laziness are enjoyed, in blessed unconsciousness of the brick-and-mortar Tempe by which they are surrounded. And all this in the matter-of-fact year 1854! —*Correspondent of the Athenæum.*

WHIMSICALITIES OF THE ELECTRIC TELEGRAPH.

A very extraordinary phenomenon was observed on the electric telegraph between New York and Baltimore on Thursday afternoon, the like of which was never before known to man. Three thunder-storms, each some thirty or sixty miles from the other, were all coming east on the telegraph route about the same time, and every discharge of electricity from either was duly recorded, *by lightning itself*, in the telegraph office at Jersey city, Philadelphia, Wilmington, or Baltimore. The wires became altogether unmanageable, and the operators being obliged to withdraw the batteries used for writing, the visitor from the clouds had the field to itself. The letters of Morse's telegraphic alphabet which this natural lightning seemed to be most partial to were L and T, but occasionally it went at the numerals, and dashed off 1's, 50's, 55's, 500's, and 5000's in its own rapid style. We learn that, when two or more thunder-clouds get in the same vicinity, and discharge their electricity at each other, or receive the fluid from the earth and return it again, or when ground lightning prevails, the effect on the telegraph wires is to produce a strange and original language which may yet be made intelligible. In fact, each kind of lightning *speaks* for itself, and *writes* what it says.—*New York Sun.*

A very novel use of the magnetic telegraph has lately been made—no less than a marriage, with the bride and bridegroom two hundred miles apart during the ceremony. A young gentleman is now in England, on business for one of the wealthiest merchants of Boston, who became the son-in-law of his employer the day before he sailed from New York, under the following circumstances:—The business trip to England was contrived by the father to separate the lovers, while a marriage with another gentleman should be forced upon the lady. The clerk who had won her heart chanced to be in New York on a temporary errand, when the orders were sent to him to embark for England without returning to Boston. The lady entered immediately into conversation with him by telegraph, and it was finally suggested and arranged that he should take his stand with a magistrate in the telegraph office at New York, and she, with her confidential friend, at the other end of the wire in Boston. This was done, and the marriage ceremony was duly performed by lightning. The bridegroom sailed (a little over a month ago), and the secret was kept until last week, when some fresh crowding of the rival lover on the lady's attention produced a disclosure. Measures are being taken to test the validity of the marriage.—*Correspondent of the Morning Chronicle.*

It is not a singular fact, but it is, notwithstanding, a fact which some of our readers may be ignorant of, that sparrows, and other small birds which happen to perch on those mysterious lines of communication, the telegraph wires, are destined, ever and anon, to suffer severe shocks of electricity, the effect of which is (though we never witnessed the phenomenon), that they drop down, not dead, but half-dead with amazement and terror. The shock, if severe enough, will destroy them. Electricity can be administered in doses which would kill a horse. Perhaps, by transmitting through the telegraphic wire a very powerful charge, the unhappy sparrows along the whole line, from London to Yarmouth, might be cut off. This, in case of necessity, or as a matter of cruel curiosity, might be employed as a means of getting rid of these vermin. It is not uncommon or extraordinary to see at least a hundred of these feathered depredators on one mile of wire. The length of the whole line of which we speak is 146 miles. A shock strong enough to destroy sparrow life would, with these *data*, cut off from the land of the living, at one fell and fatal swoop, not less than 14,600 of these pernicious little creatures. One thousand miles of railway would, in like manner, and with the same conditions, be the death of 100,000. Even supposing that death does not ensue, yet how miserable will be the state of these little animals when the whole island is covered with a veritable network of telegraphic wires! Fatal twigs these for tiny feet! The whole family of sparrows will be paralysed. The fowls of the air will be electrified. People, as they talk with each other, and whisper to each other in unheard communion, at the distance of 1000 miles, will be causing serious inconvenience to the feathered race. If Lord Palmerston's dream should be realised, and London should begin in a few years to commune by telegraph with Calcutta, how terrible the visitation to our fellow-bipeds with feathers! Each word—each letter will be a shock. To us it may be pleasing to hold intercourse with each other—to the little sufferers it will be *shocking*. We tremble to think of the consequences, and heartily recommend the case to the Society for the Prevention of Cruelty to Animals. Dog-carts sink into insignificance when compared with this wholesale palpitation—this universal twittering and consternation—among the feathered tribes. How many a sweet song will be interrupted—how many a little throat silenced—very suddenly, indeed, when this mischievous machinery shall be brought into universal play!—*Globe.*

VULGARITY.

Do you desire not to be vulgar, then cease to be affected; for we never knew an affected person who was not vulgar, nor one of natural manners to whom the phrase could be applied.—*Hyde.*

CLEMENCY.

Clemency can never exert itself with more applause than when there is the justest cause for resentment.—*Pliny's Letters.*

MYSTICISM.

Indistinctness, or mysticism, does not necessarily indicate profundity. A lake may appear shallow, because it is transparent; while a gutter may seem deep, because it is muddy.

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